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10/645,438	08/21/2003	Tony McCormack	920673-94702	7992
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BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786			TOMLINSON, RONALD D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/645,438	MCCORMACK ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Ronald Tomlinson	2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 August 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) 1-16 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-16 are objected to because of the following informalities:

Regarding **claim 1**, the phrase “the contact” in line 5 should be deleted and replaced with “the received contact” to improve the clarity of the claim.

In line 5, the phrase “other contacts” should be deleted and replaced with “other ones of said contacts” to improve the clarity of the claim.

In line 10, the word “a” before the word “reference” should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

Regarding **claim 2**, the word “a” before the word “method” in line 1 should be deleted and replaced with the word “the” to improve the clarity of the claim.

In line 2, the word “a” before the word “similar” should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

In line 3, the word “it” should be deleted and replaced with the word “contact” to improve the clarity of the claim.

In line 4, the word “a” before the word “queue” should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

Regarding **claim 3**, the word “a” before the word “method” in line 1 should be deleted and replaced with the word “said” or “the” to improve the clarity of the claim.

In line 2, the word “said” or “the” should be added before the word “one” to improve the clarity of the claim.

In line 2, the word “a” before the word “reference” should be deleted and replaced the word “the” or “said” to improve the clarity of the claim.

Regarding **claim 4**, the word “a” before the word “method” in line 1 should be deleted and replaced with the word “said” or “the” to improve the clarity of the claim.

In line 2, the word “a” before the word “reference” should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

In line 3, the word “said” or “the” should be added before the word “objects” to improve the clarity of the claim.

Regarding **claim 5**, the word “a” before the word “method” in line 1 should be deleted and replaced with the word “said” or “the” to improve the clarity of the claim.

Regarding **claim 6**, the word “a” before the word “method” in line 1 should be deleted and replaced with the word “said” or “the” to improve the clarity of the claim.

Regarding **claim 7**, the word “a” before the word “method” in line 1 should be deleted and replaced with the word “said” or “the” to improve the clarity of the claim.

In line 2, the word “the” or “said” should be added before the word “objects” to improve the clarity of the claim.

In line 3, the word “the” or “said” should be added before the word “objects” to improve the clarity of the claim.

In line 4, the word “an” before the word “object” should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

Regarding **claim 8**, the phrase “a contact centre” in line 2 should be deleted and replaced with the phrase “one of said contact centers” to improve the clarity of the claim.

In line 4, the word “the” or “said” should be added before the word “software” to improve the clarity of the claim.

In line 5, the phrase “each contact center” should be deleted and replaced with “each said contact center” to improve the clarity of the claim.

In line 6, the word “said” or “the” should be added before the word “contacts” to improve the clarity of the claim.

In line 7, the word “said” should be added before the word “contact” to improve the clarity of the claim.

Regarding **claim 9**, the word “a” before the word “method” in line 1 should be deleted and replaced with the word “said” or “the” to improve the clarity of the claim.

In line 1, the word “those” should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

In line 2, the word “said” or “the” should be added before the word “references” to improve the clarity of the claim.

In line 3, the word “said” should be added before the word “queue” to improve the clarity of the claim.

In line 3, the word “the” or “said” should be added before the word “object” to improve the clarity of the claim.

In line 3, the word “that” before the word “contact” should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

Regarding **claim 10**, the word “a” before the word “contact” in line 6 should be deleted and replaced with the word “the” or “said” to improve the clarity of the claim.

In line 7, the word “other” should be deleted and replaced with “said” or “the” to improve the clarity of the claim.

In line 9, the word “the” or “said” should be added before the word “objects” to improve the clarity of the claim.

In line 9, the word "said" should be added before the word "contact" to improve the clarity of the claim.

Regarding **claim 11**, the word "a" before the word "received" should be deleted and replaced with the word "the" or "said" to improve the clarity of the claim.

In line 5, the word "the" or "said" should be added before the word "other" to improve the clarity of the claim.

In line 28, the word "said" should be added before the word "objects" to improve the clarity of the claim.

In line 9, the word "a" before the word "reference" should be deleted and replaced with the word "the" or "said" to improve the clarity of the claim.

Regarding **claim 12**, the word "said" should be added before the word "contact" in line 5 to improve the clarity of the claim.

In line 6, the phrase "that contact" should be deleted and replaced with "the" or "said" "contact" to improve the clarity of the claim.

In line 10, the word "said" should be added before the word "object" to improve the clarity of the claim.

Regarding **claim 13**, the word "a" before the word "reference" should be deleted and replaced with the word "the" or "said" to improve the clarity of the claim.

Regarding **claim 14**, the word “a” in line 3, should be deleted and replaced with the word “a” or “the” to improve the clarity of the claim.

In line 4, the word “said” should be added before the word “software” to improve the clarity of the claim.

In line 5, the word “the” or “said” should be added before the word “objects” to improve the clarity of the claim.

In line 7, the” or “said” should be added before the word “contacts” to improve the clarity of the claim.

In line 10, the word “said” should be added before the word “contact” to improve the clarity of the claim.

In line 12, the” or “said” should be added before the word “contact” to improve the clarity of the claim.

Regarding **claim 15**, the” or “said” should be added before the word “objects” in line 5 to improve the clarity of the claim.

Regarding **claim 16**, the word “the” or “said” should be added before the words “objects” and “contact” in line 5 to improve the clarity of the claim.

In line 6, the word “the” or “said” should be added before the word “contacts” to improve the clarity of the claim.

In line 7, the word “the” or “said” should be added before the word “objects” to improve the clarity of the claim.

Regarding **claim 15**, a colon (:) is required after the word “including” to separate the preamble from the claim language.

Regarding **claim 16**, a colon (:) is required after the word "wherein" to separate the preamble from the claim language.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 and 11-12 and 15-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding **claim 1**, which is drawn toward management of contacts. In order for a claim to be directed to a statutory matter, it must have a useful, concrete and tangible result. The invention fails to produce a "real world" or tangible output as it merely places contacts in order by priority without providing them to a user or storing the contacts in memory for later use.

Regarding **claims 2-6**, which are dependent on claim 1 fails to add a tangible result to the claim, and is thus rejected for the same.

Regarding **claim 7**, which is dependent on claim 6 fails to add a tangible result to the claim, and is thus rejected for the same.

Regarding **claims 11-12**, which are drawn toward programs. In order to be statutory subject matter a claim must fall into one of the four statutory categories of invention: process, machine, composition of matter or manufacture. Claims 11-12 are

drawn only to functional descriptive material (e.g. software program), which falls outside of the statutory categories of invention.

Regarding claims 15-16, "software objects" are being recited; however, it appears that the entity would be reasonably interpreted by one of ordinary skill in the art as software, per se. Applicant's specification provides no explicit and deliberate definition of "software object", and it appears that such would be reasonably interpreted as representative of the software, which can be stored in a queue for call agents to process. As such, it is believed that the software objects is reasonably interpreted as functional descriptive material, which falls outside of the statutory categories of an invention.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-7, 11, and 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Regarding **claim 1**, the phrase “the contact” is confusing and unclear as to which particular structure it refers to in regards to the “multiple contacts” or the “received contacts” in line 3.

In line 6, the phrase “said contact” is confusing and unclear as to which particular structure it refers to in relation to the “multiple contacts” or the “received contacts” in line 3.

In line 8, the phrase “similar skillset” is confusing and unclear as to which particular structure it refers to in regards to the “similar skillset” previously mentioned in line 3.

In line 9, the phrase “said object” is confusing and unclear as to which particular structure is being referred to in regards to a “software object” or another type of “object” previously mentioned in the claim.

In line 10, the phrase “such object” is confusing and unclear as to which particular structure is being referred to in regards to a “software object” or another type of “object” previously mentioned in the claim.

In line 11, the phrase “one other object” is confusing and unclear as to which particular structure is being referred to in regards to a “software object” or another type of “object” previously mentioned in the claim.

Regarding **claim 2**, the phrase “said object” in line 1 is confusing and unclear as to which “object” the invention is referring to, whether it is one (software object) or multiple “objects”.

In line 4, the phrase "newly created object" is confusing and unclear because of the indefiniteness on whether the "newly created object" is different from the "said object" or "other object" that was previously mentioned in claim 2 and therefore, lacks antecedent basis.

Regarding **claim 3**, the phrase "newly created object" in line 2 is confusing and unclear because of the indefiniteness on whether the "newly created object" is different from the "at least one other object" that was previously mentioned in claim 3 and therefore, lacks antecedent basis.

In line 2, the word "reference" is confusing and unclear as to what the term really refers to in regards to contacts within a call center. Also, the examiner is unsure whether there is one "reference" or multiple "references" in the invention.

Regarding **claim 4**, the phrase "multiple skillset identifiers" is confusing and unclear as to the number of identifiers in the invention. There is only one skillset identifier mentioned in claim 1.

Regarding **claim 5**, the phrase "network details" is confusing and unclear because "a network" is not recited in claim 1 therefore, the phrase lacks antecedent basis.

In line 2, the phrase "those objects" is confusing and unclear as to whether "objects" being referred to are "software objects" or another type of "object" therefore the phrase lacks antecedent basis.

In line 3, the phrase the “head of the queue” is confusing and unclear because of what is “considered” the actual position in the queue the applicant is referring to, therefore the phrase lacks antecedent basis.

Regarding **claim 6**, the phrase “the objects” is confusing and unclear as to how the phrase is interpreted, whether the “objects” are new or already existing within the claim.

In line 4, the phrase “new object” is confusing and unclear because the “objects” in line 1 are created and the examiner is unsure of the “objects” and how it relates to “new objects”, therefore, it lacks antecedent basis.

Regarding **claim 7**, the phrase “object in the other of the memory spaces” is confusing and unclear what the information is trying to convey and makes no grammatical sense within the scope of the claim.

Regarding **claim 11**, the word “contact” in line 5 is confusing and unclear as to whether it is just one “contact” are apart of a group of “contacts”.

In line 6, the word “contact” is confusing and unclear as to which “contact” it relates to, whether it was multiple “contacts or the “received contact”.

In line 10, the phrase “to at least one other object” is confusing and unclear as to which “object” the claim the “object” in the phrase is referring to.

Regarding **claim 15**, the words “it”, and “it” in line 4 is confusing and unclear whether the words are referring to the “contacts” or “identifiers” within the claim. There is no logical sense whether to claim is referring to contacts and identifiers

or objects and identifiers and how they relate to being arranged in a queue position.

Regarding **claim 16**, the word "it" in line 4 and in line 5 is confusing and unclear whether the words are referring to the "contacts" or "identifiers" within the claim. There is no logical sense whether to claim is referring to contacts and identifiers or objects and identifiers and how they relate to being arranged in a "virtual" queue of a call center.

#### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-6, 8-9, and 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Mears et al (US 7092509).

Regarding **claim 1**, Mears discloses:

A method of managing contacts within a contact centre (Fig. 1,100)  
comprising the steps of:  
Assigning to a received contact a priority and skillset identifier, whereby the contact can be prioritized relative to other contacts (column 10, line 6-9, once

a contact is initiated, the contact center prioritizes the contact and sends it to the agent queue. Priority within the queue is based on customer type, media type, and agent skills).

Creating a software object (i.e. contact object) for said contact (column 42, line 10-12, the ACD proxy then requests creation of a contact object with the routing manager which is also a resident in the contact system).

Determining a queue position for said object relative to at least one other object representing a contact having a similar skillset identifier (column 47, lines 5-25, the determination of the queuing position is performed by the routing manager and assignment manager, whereas the routing manager calculates the initial queue priority and reprioritizes the contacts in the queue while the assignment adds the contacts to the "in memory" queue while determining the highest priority in the queue. Prioritizing contacts in a queue is basically positioning the objects relative to one another from highest to lowest in respect to importance)

Adding to said object a reference to said at least one other object, whereby a collection of such objects each containing a reference to at least one other object provides a prioritized queue for skillset (column 46, lines 31-40, the email proxy proceeds with routing the contact by instructing the routing manager to begin the process of adding contacts to the queue.

Regarding **claim 2**, as applied to claim 1, Mears discloses:

Said object includes a reference to two other objects having similar skillset identifier; said tow other objects representing contacts immediately ahead of and behind it within a queue, except in the case of a newly created object is positioned at the end of the queue (column 61, line 48-52, the media types (objects) are categorized according to the way they are to be treated when placed in the queue for the next appropriate agent. For example, various objects can voice calls, emails, or web chats. In contact centers for objects to be similar in nature by types and skillets and said objects are positioned into a queue in reference to other objects with one ahead and one behind a particular contact except for new objects incoming to the queue, which defaults to the back of the queue list unless priority has been established.

Regarding **claim 3** as applied to claim 1, Mears discloses:

The step of modifying said at least one other object with reference to the newly created object (claim 7, line 42, a media changing component, adapted to change a media-type (object) of any of said media-type contacts to generate a modified object within the contact).

Regarding **claim 4**, as applied to claim 1, Mears discloses:

The received contact is assigned multiple skillset identifiers, and the step of adding a reference comprises adding separate references to objects in different queues (column 12, lines 15-18, the agent administration allows agent administrator to set up the agents in the contact center system 100 and to assign the agents with contacts and objects with skillset identifiers. Most call centers

have multiple agents employed with various skillets to handle many calls that come through the queues. There are multiple call centers within a network and each call center has at least two queues, one for the agents and one for the contacts).

Regarding **claim 5** as applied to claim 1, Mears discloses:

The step of responding to a network request by sending over the network details of those objects at the head of a queue matching criteria specified in the request (column 45, lines 8-25, once a network request is made, the routing manager creates a contact object, and then the VOIP proxy then assigns media-type skill to the object. VOIP proxy populates the contact with customer data, such as a telephone number then routes the contact to the routing manager that adds the contact to the queue. Since the object is VOIP, any agent very proficient with using the Internet can respond to this request).

Regarding **claim 6** as applied to claim 1, Mears discloses:

The objects are created and maintained by a contact manager, and a queuing module carries out said determination of said queuing position according to information associated with the new object, the queuing module being further capable of adding said reference to said object (column 47, lines 5-50, objects can be created by any of the proxies such as an ACD proxy or VOIP proxy as well as the routing manager can create an object as mentioned above in claim 5. The determination of the queuing position is performed by the routing manager and assignment manager, whereas the routing manager calculates the initial

queue priority and reprioritizes the contacts in the queue while the assignment adds the contacts to the "in memory" queue while determining the highest priority in the queue. The agent manager responsibility is to add and identify the logged on agents who are capable of handling the highest priority contacts within a contact center.

Regarding **claim 8**, Mears discloses a method comprising:

A network resource having the capability of handling contacts with certain criteria becoming available, requesting from each contact center the highest priority queued object matching said criteria; receiving information relating to each such highest priority queued object and determining which object represents the contact with the highest priority and/or best match for the available resource column 47, lines 28-38, the assignment manager identifies the highest priority contact, for instance, an IVR call will generally have a higher priority than email or a fax because it is preferred not to keep a live caller on hold for an extended period of time); and issuing routing instructions to said contacts to the resource (column 47, lines 28-38, the assignment manager identifies the highest priority contact, for instance, an IVR call will generally have a higher priority than email or a fax because it is preferred not to keep a live caller on hold for an extended period of time. In addition, another object criteria would be a customer with a purchase order would have a higher priority than someone with a general information call. The responsibility of the agent manager is to identify and assign the best available agent capable of handling the highest

ranked contact. The primary goal of any contact center or contact centers is to match the best skilled agents with the highest priority contacts in order to provide the efficient customer service).

Regarding **claim 9**, as applied to claim 8, Mears discloses a method wherein:

Removing the selected object from its queue and updating those objects which contain references to the selected object, to thereby update the top of one or more queues represented at that contact center by a collection of objects (column 14, lines 19-35, system administrator can remove a skill from the agent's profile by selecting the agent then selecting the skill under the name of the agent, and clicking ok. Removing and updating objects within a queue is an everyday occurrence within a contact center and this allows the queue to automatically be updated as objects remaining in the queue move toward the front of the queue to be handled by an awaiting agent.

Regarding **claim 11**, Mears discloses a computer program product comprising instructions to:

Assigning to a received contact a priority and skillset identifier, whereby the contact can be prioritized relative to other contacts (column 10, line 6-9, once a contact is initiated, the contact center prioritizes the contact and sends it to the agent queue. Priority within the queue is based on customer type, media type, and agent skills).

Creating a software object for said contact (column 42, line 10-12, the ACD proxy then requests creation of a contact object with the routing manager which is also a resident in the contact system).

Determining a queue position for said object relative to at least one other object representing a contact having a similar skillset identifier (column 47, lines 5-25, the determination of the queuing position is performed by the routing manager and assignment manager, whereas the routing manager calculates the initial queue priority and reprioritizes the contacts in the queue while the assignment adds the contacts to the "in memory" queue while determining the highest priority in the queue. Prioritizing contacts in a queue is basically positioning the objects relative to one another from highest to lowest in respect to importance)

Adding to said object a reference to said at least one other object, whereby a collection of such objects each containing a reference to at least one other object provides a prioritized queue for skillset (column 47, lines 36-38, the assignment manager interacts with the agent manager to identify and assign those agents who are logged on and extremely capable of handling a collection of contacts in a prioritized queue.

Regarding **claim 12**, Mears discloses a computer program product comprising instructions to cause a computer system to:

A network resource having the capability of handling contacts with certain criteria becoming available, requesting from each contact center the highest

priority queued object matching said criteria; receiving information relating to each such highest priority queued object and determining which object represents the contact with the highest priority and/or best match for the available resource (column 47, lines 28-38, the assignment manager identifies the highest priority contact, for instance, an IVR call will generally have a higher priority than email or a fax because it is preferred not to keep a live caller on hold for an extended period of time); and issuing routing instructions to said contacts to the resource (column 47, lines 28-38, the assignment manager identifies the highest priority contact, for instance, an IVR call will generally have a higher priority than email or a fax because it is preferred not to keep a live caller on hold for an extended period of time. In addition, another object criteria would be a customer with a purchase order would have a higher priority than someone with a general information call. The responsibility of the agent manager is to identify and assign the best available agent capable of handling the highest ranked contact. The primary goal of any contact center or contact centers is to match the best skilled agents with the highest priority contacts in order to provide the efficient customer service).

Regarding **claim 13**, Mears discloses a system comprising a workflow processor:

Assigning to a received contact a priority and skillset identifier, whereby the contact can be prioritized relative to other contacts (column 10, line 6-9, once a contact is initiated, the contact center prioritizes the contact and sends it to the

agent queue. Priority within the queue is based on customer type, media type, and agent skills).

Creating a software object for said contact (column 42, line 10-12, the ACD proxy then requests creation of a contact object with the routing manager which is also a resident in the contact system).

Determining a queue position for said object relative to at least one other object representing a contact having a similar skillset identifier (column 47, lines 5-25, the determination of the queuing position is performed by the routing manager and assignment manager, whereas the routing manager calculates the initial queue priority and reprioritizes the contacts in the queue while the assignment adds the contacts to the "in memory" queue while determining the highest priority in the queue. Prioritizing contacts in a queue is basically positioning the objects relative to one another from highest to lowest in respect to importance)

Adding to said object a reference to said at least one other object, whereby a collection of such objects each containing a reference to at least one other object provides a prioritized queue for skillset (column 47, lines 36-38, the assignment manager interacts with the agent manager to identify and assign those agents who are logged on and extremely capable of handling a collection of contacts in a prioritized queue.

Regarding claim 14, Mears discloses a system comprising:

A request generator for generating a request, upon a network resource having the capability of handling contacts with certain criteria becoming available, requesting from each contact center the highest priority queued object matching said criteria (column 47, lines 28-38, the agent manager maintains the contacts by implementing a matching criteria that identifies the highest priority contacts based on a certain criteria such as an IVR call versus an email or fax; receiving information relating to each such highest priority queued object and determining which object represents the contact with the highest priority and/or best match for the available resource; and issuing routing instructions to said contacts to the resource (column 47, lines 28-38, the assignment manager identifies the highest priority contact, for instance, an IVR call will generally have a higher priority than email or a fax because it is preferred not to keep a live caller on hold for an extended period of time. In addition, another object criteria would be a customer with a purchase order would have a higher priority than someone with a general information call. The responsibility of the agent manager is to identify and assign the best available agent capable of handling the highest ranked contact. The primary goal of any contact center or contact centers is to match the best skilled agents with the highest priority contacts in order to provide the efficient customer service.

Regarding **claim 15**, Mears discloses a software object including:

A reference to two other objects having similar skillset identifier (column 47, lines 28-38, objects can come in many different types with similar skillsets

like a voice call, web chats, emails, or a fax; said two other objects representing contacts immediately ahead of and behind it within a queue, expect in the case of a newly created object is positioned at the end of the queue (column 61, line 48-52, the media types (objects) are categorized according to the way they are to be treated when placed in the queue for the next appropriate agent. For example, various objects can voice calls, emails, or web chats. In contact centers for objects to be similar in nature by types and skillsets and said objects are positioned into a queue in reference to other objects with one ahead and one behind a particular contact except for new objects incoming to the queue, which defaults to the back of the queue list unless priority has been established.

Regarding **claim 16**, Mears discloses a virtual queue of contacts wherein:

A virtual phone display at the workstation of the agent that enables the agent to handle telephone calls by allowing the agent to perform functions from the computer (column 49, lines 20-25). A software object including a reference to two other objects having similar skillset identifier ((column 47, lines 28-38, objects can come in many different types with similar skillsets like a voice call, web chats, emails, or a fax; said two other objects representing contacts immediately ahead of and behind it within a queue, expect in the case of a newly created object is positioned at the end of the queue (column 61, line 48-52, the media types (objects) are categorized according to the way they are to be treated when placed in the queue for the next appropriate agent. For example, various objects can voice calls, emails, or web chats. In contact centers for objects to be

similar in nature by types and skillets and said objects are positioned into a queue in reference to other objects with one ahead and one behind a particular contact except for new objects incoming to the queue, which defaults to the back of the queue list unless priority has been established. This system also can maintain a virtual queue of contacts as well as queue of contacts in real time.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mears et al (US 7092509) in view of Wallenius et al (US 7161925) as applied to claim 6 above, and claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mears et al (US 7092509) in view of Lambert et al (US 7174556).

Regarding **claim 7**, Mears lacks disclosing a method wherein:

The contact manager has a memory space in which objects are stored, and the queuing module has a memory space in which objects are updated, and said memory spaces either form part of a common space or a replication service is provided to update changes to an object effected in one of the memory spaces with corresponding changes to a copy of the object in the other of the memory spaces.

The general concept of providing memory to store and update objects is well known in the art as illustrated by Wallenius which discloses that a database may be a separate (external/internal) memory, or a memory area used for storing information such as a customer's name, photo, or telephone number (column 6, lines 20-28) and the result of the such an external database query is then presented to the user of the called terminal, and used to update the local database with caller information (column 12, lines 45-48).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mears with the general concept of providing memory for storing and updating objects to make changes to the data and ensure current status of contacts within a call center.

Regarding **claim 10**, Mears lacks disclosing a method comprising wherein:

Maintaining a network queue of contacts by automatically replicating changes in contact objects at each contact center with corresponding changes in contact objects in said network queue.

The general concept of copying changes of contact objects in a queue is well known in the art as illustrated by Lambert et al which discloses that a remote computer system to be administered to a network. A query object is sent to the remote queue to obtain a first and second copy of the object. A second copy is performed to make one or more updates. If the two copies match, the administrator processes the changes and the object is replaced with the updated version (see abstract, p. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mears with the general concept of replicating changes for updating objects within a queue system to verify the current status of contacts within a call center.

**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Tomlinson whose telephone number is 571-270-1602. The examiner can normally be reached on M-F 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDT  
03/31/07

FRANTZ JULES  
SUPERVISORY PATENT EXAMINER

